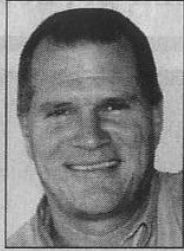


Ways to find your need for Internet speed



John Deans

Overall the residential Internet access choice-pyramid from optimum to last resort is as follows:

DSL (cheap, fast and most reliable).

Cable (reasonable cost, fast and reliable).

Wireless (moderate cost, fast and mostly reliable).

Cellular G3 (higher cost, quick and mostly reliable).

Satellite (high cost, fast downstream but slow upstream and somewhat reliable).

Cellular Edge (high cost, slowest broadband, low reliability).

Commercial clients have another choice called a T1. This is a dedicated copper line from AT&T with a speed of 1.5Mb/s both down and up that comes with a Service Level Agreement (SLA) and a Cisco System router.

The combination of the specialized and conditioned circuit along with the top-end Internet access service provides the highest level of availability along

with strong performance.

The downside is T1s are not cheap. The price however has come down from \$1,000 to around \$400 a month over the past five years.

Several of my clients that must have robust Internet access with 99.95% uptime have made the switch from DSL or wireless and upgraded their service to a T1.

Another neat thing about commercial T1 service is that the line is constantly monitored by AT&T and they call the customer whenever there are any problems with the link. I have had time when I did not even know there was trouble with the T1 and they called me to apologize letting me know that the issue has been resolved.

Since even the lowered monthly T1 cost of \$400 is way too high for most of my clients, I still have to manage the uptime and performance of the other broadband technologies.

With location being the prominent factor, it breaks down with most of my inner Brenham and Chappell Hill clients are on

AT&T's DSL, some inner and mostly outer Brenham people use SuddenLink's cable Internet service, and the rest use a mix of wireless and satellite.

The performance of these Internet Service Providers (ISPs) is based on a combination of availability and speed. Since the speed is irrelevant if the service is not even operational, let's secure that one first.

To assure broadband availability, the best thing you can do is feed the components clean and constant power. This is done by connecting the DSL, cable or wireless modem and Ethernet router to a battery powered UPS (Uninterruptible Power Supply). UPS devices can be purchased here in town for around \$50.

For years I have been preaching to put your computers on UPS systems to keep them free from electrical power spikes and short power outages. These UPSs are also quite helpful to keep your Internet connection up and the equipment safe from any power irregularities or dangerous lightning hits during storms.

After you have provided good clean power to your high speed broadband equipment, next you will want to test the actual downstream and upstream performance of your ISP. One of my favorite sites is www.SpeedTest.net, which allows you to choose the test server closest to your location.

This is done by putting your cursor over the pyramid icon representing the location of the performance test servers. They will highlight in yellow the recommended closest server to you which should be either the Houston or Austin server. After clicking on one of them the test will be performed first downstream and then upstream.

Thanks to Texas Broadband I am getting about 2.5 Mbs downstream and 2.0 Mbs upstream which gives me great performance and blazing fast downloads. Everyone else on most all of the ISPs should be getting at least 1 Mbs down and 512Kbs up with the exception of satellite.

Since there is a 22,000-mile roundtrip to the satellite with ISPs like Hughes and WildBlue, the upstream speeds are down around 100 Kbs and there is also high latency of around 800 ms which make services like Voice over IP (VoIP) non-functional. That is why satellite should be one of your last choices.

After you have run the performance test and have verified you are getting what you have paid for, now you can utilize a great little tool called NetPerSec that I

have been using for several years on hundreds of computers and even servers.

You can download NetPerSec from my website at DeansConsulting.com under the Company Essentials and then Tool Box.

This handy little utility quickly installs and puts an active icon in your Windows system tray on the lower right corner of your screen. The small graph shows the second-by-second ISP performance with upper red showing the download speeds and the lower blue representing the upload speeds.

Double-click the NetPerSec icon and it will expand into a larger real-time graph with a green chart showing the 60 second average behind both the received (downstream) and send (upstream) live timelines.

It is cool to watch the NetPerSec graph in action when you run the ISP performance test at www.SpeedTest.net. Try it and you will see how well your network interface card (NIC) is communicating with your ISP and the Internet as a whole.

Bottom line: Since we are constantly on the Web now, use these techniques and tools to verify you are getting the need for Internet speed!

Next week: Collectivity: Inventory Your Stuff!

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